



Evidence Summary

Citation Analysis Shows Promise as an Effective Tool for Monograph Collection Development

A Review of:

Enger, K. B. (2009). Using citation analysis to develop core book collections in academic libraries. *Library & Information Science Research*, 31(2), 107-112.

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Abstract

Objective – To test whether acquiring books written by authors of highly cited journal articles is an effective method for building a collection in the social sciences.

Design – Comparison Study.

Setting – Academic library at a public university in the US.

Subjects – A total of 1,359 book titles, selected by traditional means (n=1,267) or based on citation analysis (n=92).

Methods – The researchers identified highly-ranked authors, defined as the most frequently cited authors publishing in journals with an impact factor greater than one, with no more

than six journals in any category, using 1999 ISI data. They included authors in the categories Business, Anthropology, Criminology & Penology, Education & Education Research, Political Science, Psychology, Sociology/Anthropology, and General Social Sciences. The Books in Print bibliographic tool was searched to identify monographs published by these authors, and any titles not already owned were purchased. All books in the study were available to patrons by Fall 2005. The researchers collected circulation data in Spring 2007, and used it to compare titles acquired by this method with titles selected by traditional means.

Main Results – Overall, books selected by traditional methods circulated more than those selected by citation analysis, with differences significant at the .001 level.

However, at the subject category level, there was no significant difference at the .05 level. Most books selected by the test method circulated one to two times.

Conclusion – Citation analysis can be an effective method for building a relevant book collection, and may be especially effective for identifying works relevant to a discipline beyond local context.

Commentary

Although not without limits, this study was well designed, and adds depth to the literature in its investigation of an innovative approach to collection development. Using Glynn's (2006) Critical Appraisal Checklist, the study scores well for validity. The methodology is well thought out and is described in detail. Analysis of results is appropriate and outcomes are clearly discussed and presented. While the results may not be generalized without further research, the study does hold promise for future researchers? There are, however, some limitations to the study that should be considered when planning further research or application of results.

One primary assumption made by the investigators of the study was that authors of journal literature in the social sciences are likely to also be the authors of important book literature, an assumption that remains untested. In fact, Cronin (1997) discovered that in Sociology literature, there were distinctly higher sets of frequently cited authors in the monograph literature versus the journal literature, lending doubt to the assumption.

While Enger examines the theoretical underpinnings of citation analysis and reviews the related literature, she fails to adequately address some of the primary arguments against citation analysis, or more specifically, ISI's data and methodologies, especially in the social science context. Noticeably missing in her literature review is Nederhoff's review of citation analysis in the humanities and social sciences. A more thorough discussion of

variables such as author age stratification, reasons for citation, US-centricity and other factors described in the literature (for example, Case & Higgins, 2006; Leimu & Koricheva, 2005; Porta, 2006) might have strengthened the article and assisted readers in using the study to inform their own decision making.

One problematic aspect of the methodology is that the books selected by citation analysis only included titles that had not already been selected by traditional means. It would have been interesting to examine the overlap between the two sets in order to better understand the strengths and limitations of each means of selection. The sample of books selected by citation analysis, perhaps because of this, is quite small (less than 7% of the total). It is also unclear what the publication date range was for each sample. If the books selected by citation analysis alone were older (which is likely, considering the citation cycle), publication date might have been a confounding variable, since a recent study found that among books acquired in a specific year, those with an older publication date circulated more frequently (Adams, 2008).

There is also some confusion regarding the ISI Journal Citation Reports (JCR) categories used, as the lists differ between the abstract, article text, Table 1 in the article, and my own consultation of the online ISI JCR for 1999. General Social Sciences, listed only in the article text, is not reflected in the current online product. The article text also lists both "Anthropology" and "Sociology/Anthropology", although the latter category doesn't exist in JCR, nor does the author use it in other places.

Citation analysis, while well established, is in a dynamic period. Efforts by administrators to be more "data driven" strengthen the appeal of measures including ISI's impact factor, and ISI is increasingly extending the reach of its scope to quantify the impact of authors and institutions. Scopus and Google Scholar are providing alternative sources of data and new measures, such as the h-index and Eigen factor, are being developed to address

criticisms to ISI's products. At the same time, traditional monograph collection development procedures can be too time consuming as blended and liaison librarians struggle to balance increasing and diversifying workloads. Enger's study provides an interesting approach that bears further exploration.

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